

CLAIMS:

1. A method of providing fresh meat products, comprising:
irradiating the meat products in a first controlled atmosphere;
packaging the irradiated meat products in a second controlled atmosphere; and
distributing the packaged irradiated meat products to a retail store.
2. The method of claim 1, wherein the first controlled atmosphere excludes oxygen and the second controlled atmosphere is high in oxygen.
3. The method of claim 1, wherein the steps of irradiating the meat products in the first controlled atmosphere and packaging the irradiated meat products in the second controlled atmosphere are performed in the same meat packing facility.
4. The method of claim 1, further comprising:
adding an antioxidant to the meat products prior to the step of irradiating the meat products in the first controlled atmosphere.
5. The method of claim 4, wherein the antioxidant is a rosemary extract.
6. The method of claim 4, wherein the packaged irradiated meat products have a color-life of over three weeks.
7. The method of claim 6, wherein the retail store is a convenience store.

8. The method of claim 1, further comprising:
topically applying an antioxidant to the irradiated meat products
prior to the step of packaging the irradiated meat products in
the second controlled atmosphere.
9. The method of claim 8, wherein the antioxidant is a rosemary
extract.
10. The method of claim 8, wherein the packaged irradiated meat
products have a shelf-life and a color-life of over three weeks.
11. The method of claim 10, wherein the retail store is a convenience
store.
12. The method of claim 1, wherein the retail store is a superstore that
does not include an in-store meat processing department.
13. The method of claim 1, further comprising:
providing a clean curtain between a meat processing area where the
step of irradiating meat products is performed and a meat
packaging area where the step of packaging the irradiated
meat products is performed.
14. The method of claim 1, wherein the step of irradiating meat products
is performed in a sealed conduit having the first controlled atmosphere therein.
15. The method of claim 14, wherein the step of irradiating meat
products comprises:

conveying the meat products to be irradiated through a processing area in the sealed conduit;
controlling the first controlled atmosphere in the sealed conduit to be different from an ambient atmosphere; and
applying radiation to the meat products in the processing area.

16. The method of claim 15, wherein the first controlled atmosphere in the sealed conduit excludes oxygen.

17. The method of claim 16, wherein controlling the first controlled atmosphere in the sealed conduit comprises filling the sealed conduit with a gas selected from the group consisting of nitrogen and carbon dioxide.